1st January

Prove \((2n + 2)^2 - (2n + 1)\) is always odd.

Rationalise the denominator

\[
\frac{3 + \sqrt{2}}{\sqrt{3}}
\]

Shown is \(f(x)\)

Sketch the function \(f(x + 1)\)

\(f(x) = 3x + 2\)
\(g(x) = x^2\)

Find \(fg(x)\)

Find \(gf(5)\)